

# **SASI<sup>TM</sup> Student Reporting Procedures**



**Office of Career and Technology Education  
South Carolina Department of Education**

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State Superintendent of Education**

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## Preface

This student reporting procedures manual is the Office of Career and Technology Education's official guide for SASI data entry and reporting. Data from schools are collected annually through SASI to meet state and federal requirements: the career center report card performance measures and high school report card career and technology education (CATE) student performance indicators under the South Carolina Education Accountability Act of 1998 and the six accountability standards under the Carl D. Perkins Vocational and Technical Education Act of 1998.

It is critical that data reported to the State Department of Education (SDE) be complete and accurate. State and school district funding is affected by the data submitted. School districts, high schools, and career centers must collaborate and communicate to review data at the local level before submitting data to the SDE. Your efforts in ensuring that your school's and district's data are of the highest quality possible are appreciated.

**Note:** All shaded text in this document appears verbatim on the SASI screens.

## DEADLINES

The deadlines for submission of CATE data are as follows:

Student placement follow-up report.....April 14, 2006 (Friday)

End-of-the-year report.....due with the SASI fourth quarterly data  
collection

## NOTICE

The activity/course codes specified in this document are also listed in two other State Department of Education documents related to course sequencing and educator credentials: *South Carolina Department of Education Activity Coding System for SASI* and *Required Credentials for Professional Staff Members in the Instructional Programs of South Carolina's Public Schools*, both issued by the Office of School Quality. Therefore, when course titles change, titles/codes are deactivated, or new titles/codes are created, those changes will be made not only in this document but in these two other SDE documents as well. The *Activity Coding System for SASI* identifies these modifications in blue type in table 3. All three of the documents will be reissued in the fall of each year. Changes will go into effect the following school year.

This document is also available online at <http://www.myschools.com/offices/cate>.

# SASI Career and Technology Education Student Data

## CATE ATOM SCREENS

**SC Career & Technology Educ. Data Entry**

Last Name	First Name	Middle Name	Grd	Gen	Student ID
			↓	↓	
Ec Disadv	Ed Barriers	Ind Disab	Sgl Parnt	Dpld Hmkr	Completer
Yr Comp	Remote				
↓	↓	↓	↓	↓	↓
Exceptions	Diploma	Tech Prep	CIP code	CATE Concentrator	CATE Placement
↓	↓	↓	↓	↓	↓
Placement Employer	Placement Phone				
Placement Job Title	Placement Supervisor	Placement Start Date			
Placement Higher Ed Name	Placement Higher Ed Program				
Placement Military Branch	Placement Military Training	AtomDate			↓

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**SC Career & Technology Educ. Data Entry**

Last Name	First Name	Middle Name	Grd	Gen	Student ID
			↓	↓	
Certification 1	Certification 2	Certification 3			
↓	↓	↓			

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## FIELD DESCRIPTIONS AND ENTRIES

### Economically Disadvantaged

### Ec Disadv

The term “economically disadvantaged” refers to individuals or families (including foster children) who are eligible for Aid to Families with Dependent Children (AFDC), food stamps, Title I, or free/reduced lunches; who are in receipt of a Pell grant; or who are identified by the state as low income.

**Entry:** Y (“Yes”) if applicable

### Educational Barriers

### Ed Barriers

The term “educational barriers” refers to students whom the Perkins Act references as “individuals with other barriers to educational achievement” (Section 3.23(F)). Included among these individuals are high school students and out-of-school youths, as well as incarcerated youths and adults who have fallen or who are at risk of falling at least one grade level behind their peers, youths scoring below the 25th percentile on standardized tests, high school students whose grades are below 2.0 on a 4.0 scale, and high school students who have failed to attain minimal academic competencies.

**Entry:** Y (“Yes”) if applicable

### Individual with a Disability

### Ind Disab

The term “individual with a disability” refers to an individual with any disability as defined in Section 3 of the Americans with Disabilities Act (ADA) of 1990. (The text of the ADA, which is available online at <http://www.usdoj.gov/crt/ada/pubs/ada.txt>, contains the full definition of the term.)

**Entry:** Y (“Yes”) if applicable

### Single Parent

### Sgl Parnt

The term “single parent” refers to a *student*: either a pregnant female student who is unmarried or a male or female student who is unmarried or legally separated from a spouse and has a minor child or children of whom he or she has either full custody or joint custody.

**Entry:** Y (“Yes”) if applicable

### Displaced Homemaker

### Dpld Hmkr

The term “displaced homemaker” refers to an individual who has worked primarily without remuneration to care for a home and family and for that reason has diminished marketable skills, who has been dependent on the income of another family member but is no longer supported by that income, or who is a parent whose youngest dependent child will become ineligible to receive assistance under Part A of Title IV of the Social Security Act within two years after the date on which the parent applies for assistance under this title and who is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment.

**Entry:** Y (“Yes”) if applicable

## Completer

## Completer

The **Completer** field identifies a student who has completed a CATE program in the current year or a previous year. A CATE completer is a student with an assigned CIP code who has earned at least 4 units of credit in CATE courses leading to a career goal. If the data for completer status are not intentionally deleted, they will carry over in the database until the student exits high school.

**Entry:** Y (“Yes”) if applicable

## Completion Year

## Yr Comp

This optional field assists you in knowing the year in which the student completed the fourth unit of course work related to his or her career goal.

**Entry:** four-digit year

## Remote School Number

## Remote

The **Remote** field specifies the location where the CATE program is offered. An entry should be made in this field **only** if the program is offered at a location other than the student’s high school. This entry will identify the other high school or the career center that offers the particular program.

- ▶ **Note:** Leave this field blank if the program is offered at the student’s home high school.

**Entry:** seven-digit SIDN (school identification number, sometimes referred to as the BEDS code)

## Exceptions

## Exceptions

Data are to be entered on an annual basis for all students who would be exempted from the state assessment for Perkins and report card standards on the basis of the criteria specified below.

**Entry:** I or W

- ▶ Enter **I** (“IEP—nondiploma”) if the student has an IEP (individualized education program) stating that **not all** of the core competencies will be taught.

Use the exception code **I** *exclusively* for students whose IEPs state that mastery of *only a portion* of the core competencies in a program is appropriate.

Many students with IEPs do receive instruction in all of the required competencies and therefore do qualify for a South Carolina high school diploma, and these students *should not be included here* as exceptions.

- ▶ Enter **W** (“Withdrawn”) if the student withdrew from the CATE program or from the school during the school year. Delete the CIP code for this student if it remains in the database for the following school year.

## Diploma

## Diploma

Enter diploma data for **all** twelfth-grade students. The data for each student will be used to assess the school's and district's performance for the Perkins accountability standards and the career center report card measure for high school graduation. Indicate in this field whether each twelfth-grade student met the criteria for graduation.

Leave the field **blank (default)** if the student did *not* receive a South Carolina high school diploma or if the student failed to meet graduation requirements and therefore received a certificate of attendance.

- ▶ **Note:** For any twelfth-grade student whose **Diploma** field is left blank and who meets all graduation requirements during the summer and receives a South Carolina high school diploma prior to the next school year, the school may change the entry code to "Y" and send a notification letter to the Office of Career and Technology Education by September 1. The notification should include the student's identifying information and a request to update the **Diploma** field and should specify the final grade(s) the student obtained in course(s) he or she took during the summer to meet the requirements for graduation.

**Entry: Y ("Yes")** *only* if the student received a South Carolina high school diploma

## Tech Prep

## Tech Prep

The term "Tech Prep" refers to a student with an assigned CIP code who is fulfilling the requirements of a career major by pursuing at least 4 units of credit in an approved, articulated sequence of CATE courses leading to a career goal as well as taking the academic courses required for graduation. For the purposes of reporting a high school Tech Prep student, a *career major consisting of at least 4 units of credit in an approved, articulated sequence* will be indicated by all of the following:

- (a) The student has been assigned a CATE CIP code and is taking the academic courses required for graduation, and
- (b) one or more of the courses included in the CATE program is similar in content/competencies to a vocational-technical postsecondary offering at a two-year technical college or a four-year college (or two-year apprenticeship program) in the geographical area, and
- (c) the school district or career center has established an articulation agreement with the two-year or four-year college (or two-year apprenticeship program) to help the student make a smooth transition from one level to another without experiencing delays, duplication of courses, or loss of credit.

- ▶ **Note: Academic courses** in the student's career major may include English language arts, mathematics, and science courses designated as Tech Prep (applied academics), College Prep, or a combination of Tech Prep and College Prep courses that complement the designated career and technology program. The **articulation agreement** should outline the requirements for high school students to obtain postsecondary credit and/or advanced placement for the comparable course or courses at the postsecondary institution (or to continue in the apprenticeship program).

**Entry:** Y ("Yes") if applicable

### **Classification of Instructional Programs Code**

### **CIP code**

The Classification of Instructional Programs (CIP) codes designate the specific CATE programs and are used for federal reporting and for assessing the federal Perkins accountability standards. These codes are used to identify students who are pursuing at least 4 units of credit in CATE courses leading to a career goal. ***CIP codes are not the same as course codes.***

**Entry:** six-digit CIP code

#### ▶ **Guidelines for Assigning CIP Codes**

- A. Use **only** approved CIP codes (see appendix C).
- B. **Do not** use postal codes (zip codes) in the **CIP code** field.
- C. Do not assign a CIP code to a student who periodically enrolls in CATE courses for interest and has no plans to complete a program.
- D. Do not assign a CIP code to a student who will not have the opportunity to complete a CATE program.
- E. Do not change a student's CIP code if he or she completes one CATE program in the eleventh grade and enrolls in the first level of another CATE program in the twelfth grade. CIP codes may be modified, however, to reflect revisions to the student's course of study or career major.
- F. Select the CIP code on the basis of the student's postgraduation plans if he or she completes two programs.
- G. **Do not use the CIP code field for any purpose other than to designate the specific CATE program.**

Programs may be tailored to fit students' career goals. Such customizing may even involve allowing a student to select courses from different CATE cluster areas. Local businesses, advisory committees, and school district/career center personnel should be consulted when customized programs for students are being determined. Each course in a customized program must include competency-based applied learning. Many students may choose not to take advantage of the increased offerings. However, those students who have been encouraged to pursue instruction that is strictly related to established career majors now have the opportunity to receive this type of instruction.



\*\*\*\*\*NEW FIELD\*\*\*\*\*  
 \*\*\*\*\*DESCRIPTION UNDER CONSTRUCTION\*\*\*\*\*

### CATE Placement Code

### CATE Placement

School districts and career centers are required by South Carolina law (S.C. Code Ann. § 59-53-1960) and by State Board of Education Regulation 43-234 to survey their CATE completers ten months after graduation to determine their placement status with regard to employment, postsecondary education, or military service. A record of the responses to this survey must be maintained by the districts/career centers for a period of three years. The survey records should contain sufficient information to allow for the verification of all reported placements.

In order to be available for placement, students must be program completers and must have graduated with a South Carolina high school diploma. Students who have IEPs are *not* included if their IEPs state that mastery of all South Carolina core competencies is not appropriate for them.

**Entry:** *(one of the following CATE placement codes as appropriate)*

- A – Employed, Related**
- B – Employed, Unrelated**
- C – Continuing Education or Postsecondary Education**
- D – Military**
- E – Unemployed or Not Seeking Employment**
- F – Not Available for Placement (Status Unknown, Deceased, Incarcerated, or Medical Disability)**
- G – Still in High School**

### Placement Information Necessary for Verification

- For students placed in **employment (placement code A or B)**

#### Placement Employer

**Entry:** name of the company (35-character limit) where the student was placed after graduation

#### Placement Phone

**Entry:** phone number (15-character limit) of the student's employer

#### Placement Job Title

**Entry:** title of the job (25-character limit) in which the student was placed after graduation

**Placement Supervisor**

**Entry:** name of the supervisor (25-character limit) within the company where the student was placed after graduation

**Placement Start Date**

**Entry:** student's start date for placement in employment after graduation

- ▶ For students placed in **higher education (placement code C)**

**Placement Higher Ed Name**

**Entry:** name of the postsecondary institution (25-character limit) the student attended after graduation

**Placement Higher Ed Program**

**Entry:** name of the program (25-character limit) at the postsecondary institution to which the student was admitted

- ▶ For students placed in the **military (placement code D)**

**Placement Military Branch**

**Entry:** name of the military branch (30-character limit) in which the student enlisted after graduation

**Placement Military Training**

**Entry:** name of the type of military training (25-character limit) the student received from the military branch in which he or she enlisted after graduation

Placement-level data will be used to assess the Perkins Act and career center report card standard for placement. As mandated in Section 59-53-1960 of the Code of Laws of South Carolina, in order for a job preparatory program other than occupational agriculture to continue to exist, 50 percent of its graduates who are available for placement must be placed during the prior three years in the area in which they were trained. The placement data reported in 2005–06 will be compiled with the data reported for the previous two years to obtain the percentage of students placed in a related area for the three-year period.

Students must be advised prior to enrollment in a job preparatory program of the possible discontinuation of the program and of the employment outlook for program graduates. Students enrolling in CATE programs that are not preparatory for employment must be clearly advised of this fact by the school district.

## Industry Certification

## Certification 1, Certification 2, Certification 3

Provide certification information for your CATE students by selecting the appropriate certification(s) in the drop-down box on the SASI screen.

Web addresses are provided both for your information and for the documentation of much of the text that follows here. These URLs were operational as of the writing of this document. The State Department of Education is not responsible for changes made to Web addresses after this manual is published.

### 01 – CompTIA A+

CompTIA A+ is an international industry credential that validates the knowledge of computer service technicians. Earning CompTIA A+ certification proves that a candidate has a broad base knowledge and competency in core hardware and operating system technologies including installation, configuration, diagnosing, preventive maintenance, and basic networking.

<http://www.comptia.org>

### 02 – Academy of Info. Technology

The Academy of Information Technology (AOIT) curriculum introduces students to the broad career opportunities in today's digital workforce and equips them with the personal, analytical, technical, and communications skills they need.

<http://www.naf.org>

### 03 – ARI – Industry Competency Exams (ICE)

The Air-Conditioning and Refrigeration Institute (ARI) certification programs are industry developed, driven, and managed for entry-level technicians who install, service, and maintain HVACR equipment.

<http://www.ari.org/cert/>

### [04—discontinued]

### 05 – ASE – Auto Collision Repair

The National Institute for Automotive Service Excellence (ASE) is responsible for the Automotive Technician Training Certification Program. The purpose of this certified program is to improve the quality of training offered for students at the high school level. There are four areas in which these students can obtain ASE certification in auto collision repair: Structural Analysis and Damage Repair, Mechanical and Electrical Components, Painting and Refinishing, and Non-Structural Analysis and Damage Repair.

<http://www.asecert.org>

## **06 – ASE – Auto Technology**

The National Institute for Automotive Service Excellence (ASE) is responsible for the Automotive Technician Training Certification Program. The purpose of this certified program is to improve the quality of training offered for students at the high school level. There are four areas in which these students can obtain ASE certification in auto technology: Brakes, Electrical/Electronic Systems, Engine Performance, and Suspension and Steering.

[www.asecert.org](http://www.asecert.org)

## **07 – AWS**

The American Welding Society (AWS) certifies the skills of engineers, inspectors, technicians, and welders. The AWS offers various certification programs to meet a variety of needs, providing students with specialized preparation to expand their knowledge base and to work with diverse codes, standards, and specifications industrywide.

<http://www.aws.org>

## **08 – Academy of Finance**

The National Academy Foundation's Academy of Finance (AOF) introduces students to the broad range of career opportunities in the financial services industry and gives them new choices for their future.

<http://www.naf.org>

## **09 – Academy of Hospitality and Tourism**

The Academy of Hospitality and Tourism (AOHT) provides public high school students with the requisite knowledge and skills for a successful career in one of the world's largest service industries through a curriculum that provides an in-depth look at all aspects of tourism and hospitality, including coursework in business, geography, hospitality, and economics.

<http://www.naf.org>

## **10 – Electronics Technician**

The Electronics Technicians Association (ETA) International is a not-for-profit worldwide professional association for electronics technicians. The ETA offers two levels of basic ETA certification: (1) certification as a SET (Student Electronics Technician) for high school students and (2) certification as a CETa (Certified Electronics Technician, associate) for individuals who have less than two years' experience or trade school training as electronics technicians. All technicians must pass the associate-level requirements before they can qualify to sit for the full (Journeyman) CET certification.

<http://www.eta-i.org/Basic.html>

## **11 – Certified Novell Administrator**

Novell offers the Certified Novell Administrator (CNA) credential for those interested in basic NetWare administrative skills. CNAs provide companies with direct support for software users in various work environments including professional offices and small businesses, work groups or departments, and corporate information services.

<http://www.novell.com/training/certinfo>

## **12 – Certified Nurse Aide**

To be eligible to provide direct care to residents of South Carolina Medicaid-certified nursing facilities, an individual must be a certified nurse aide (CNA). A nurse aide is deemed certified if his or her name is on the South Carolina Nurse Aide Registry (SC NAR). An individual who has never been on a nurse aide registry in any state must attend a state-approved training program and take both parts of the NNAAP (National Nurse Aide Assessment Program) examination to become a CNA in South Carolina.

<http://www.promissor.com>

**[13—discontinued]**

## **14 – Cisco Certified Network Associate**

Certification as a Cisco Certified Network Associate (CCNA) indicates that an individual has a foundation in and apprentice knowledge of networking. CCNA certified professionals can install, configure, and operate LAN, WAN, and dial access services for small networks (100 nodes or fewer), including but not limited to use of these protocols: IP, IGRP, Serial, Frame Relay, IP RIP, VLANs, RIP, Ethernet, Access Lists.

<http://www.cisco.com>

## **15 – Emergency Medical Technician**

In South Carolina, there are three levels of Emergency Medical Technician (EMT) Certification: Basic, Intermediate, and Paramedic. To be *initially* certified as an EMT at any level *for the first time in this state*, the candidate must successfully complete the appropriate South Carolina-approved EMT training program and pass the appropriate level Nationally Registry examination. If the candidate has earned EMT certification in another state, he or she may meet the qualifications to receive reciprocity regarding the EMT credential.

<http://www.scdhec.gov/hr/ems/emscertification.htm>

**[16—discontinued]**

## **17 – EPA Section 608**

Environmental Protection Agency (EPA) Section 608 technician certification is required in order for an individual to service building air conditioning and refrigeration systems and to purchase refrigerants. There are four types of EPA-Approved Section 608 certification, each involving a knowledge of EPA regulations relating to refrigerant recovery.

<http://www.acca.org>

## **18 – First Responder**

The South Carolina chapter of the American Red Cross offers the course First Aid—Responding to Emergencies with Adult, Child, and Infant CPR/AED to provide the citizen responder with the knowledge and skills necessary to help sustain life and minimize the consequences of injury or sudden illness until advanced medical help arrives. This program is designed primarily for use in high schools, colleges, universities, and other settings that require a curriculum of greater length than the American Red Cross FA/CPR/AED Program. In order to receive certification, students must participate in all skill sessions and scenarios, demonstrate competency in all required skills, and correctly answer at least 80 percent of the questions in the appropriate sections on the written exam.

<http://www.redcross.org/>

## **19 – IC 3**

The Internet and Computing Core Certification (IC<sup>3</sup>) program ensures that students have the knowledge and skills required for basic use of computer hardware, software, networks, and the Internet. IC<sup>3</sup> is a gateway to advancement in education, employment, or other certification programs.

<http://www.certiport.com/yourpersonalpath/ic3certification>

## **20 – Industry Computer Programming**

Two main types of certifications are available for computer programmers:

- (1) certification in Java language as Sun Certified Programmers and
- (2) certification in Visual Basic and Visual Basic .NET as the following: Microsoft Certified Systems Administrators (MCSAs), Microsoft Certified Applications Developers (MCADs), and Microsoft Certified Solution Developers (MCSDs)

[http://suned.sun.com/US/certification/java/java\\_certpath.html](http://suned.sun.com/US/certification/java/java_certpath.html)

<http://www.microsoft.com/traincert/default.asp>

**[21—discontinued]**

**[22—discontinued]**

## **23 – Microsoft Office Specialist**

The Microsoft Office Specialist (MOS) program provides computer program literacy, measures proficiency, and identifies opportunities for skills enhancement. Successful candidates receive the MOS certificate, a credential that is recognized worldwide as proof that an individual has the desktop computing skills he or she needs to be able to work productively and efficiently.

<http://www.microsoft.com/learning/mcp/officespecialist/default.asp>

## **24 – Ntl. Health Care Found. Skills Standards**

The National Health Care Foundation Skill Standards Assessment Certificate Program, implemented by the National Consortium on Health Science and Technology Education, certifies that an individual has acquired the health care knowledge and skills at the cluster foundation and pathway levels that are recognized by employers and in high school and postsecondary education across the nation.

<http://www.nocti.org/StudentCertificatePrograms.cfm>

## **25 – NCCER – A/C Ref. Technology**

## **26 – NCCER – Carpentry**

## **27 – NCCER – Electricity**

## **28 – NCCER – Industrial Systems Technology**

## **29 – NCCER – Masonry**

## **30 – NCCER – Plumbing**

## **31 – NCCER – Welding Technology**

## **[56 – NCCER – Core]**

The National Center for Construction Education and Research (NCCER) is a not-for-profit education foundation that was created in 1995 to address the severe workforce shortage facing the industry and to develop a standardized training process and curricula. Among its services, the NCCER develops curricula and conducts programs of education and training. In addition, it provides assessments to evaluate the journey-level knowledge and skills of experienced craftspeople as part of the National Craft Assessment and Certification Program (NCACP). NCCER also provides academic assessments for high school career and technical education as part of the National Construction Career Tests (NCCT).

<http://www.nccer.org>

## **32 – CompTIA Network+**

CompTIA Network+ certification is an international industry credential that validates the knowledge of networking professionals.

<http://www.comptia.org>

### **33 – NIMS**

A National Institute for Metalworking Skills (NIMS) credential is recognition that an individual's competencies have been validated against a set of industry-written skill standards. The credential is awarded on the basis of performance tests and related theory exams. Because the performance requirements and exams are the same nationwide, the credential is portable.

<http://www.nims-skills.org>

### **34 – Outdoor Power Equipment**

The Outdoor Power Equipment Technician Certification Program, conducted by the Equipment and Engine Training Council (EETC), offers technicians industry-sanctioned certification on the basis of tests given year-round across the United States. Tests are offered in 2-cycle engines, 4-cycle engines, drivelines/hydraulics/hydrostatics, electrical systems, compact diesel engines, and generators.

<http://www.eetc.org/frameset-techcert.html>

### **35 – Pharmacy Technician**

The Pharmacy Technician Certification Board (PTCB) is responsible for the development and implementation of policies related to national certification for pharmacy technicians. In South Carolina, an individual may be certified by the PTCB as a pharmacy technician if he or she has met a set of specific requirements, among which are a high school diploma or equivalent, successful completion of a PTCB-approved technician course, and 1,000 hours of work as a technician under the supervision of a licensed pharmacist.

<http://www.ptcb.org>

**[36—discontinued]**

### **37 – ProStart**

The ProStart program, offered through participating high schools through the South Carolina's Tourism and Hospitality Educational Foundation, utilized as an industry-driven curriculum designed by the Educational Foundation of the National Restaurant Association to teach, test, and award industry-recognized certificates to students meeting high standards in hospitality education. This two-year program provides instruction in twenty-five subject areas, ranging from basic food preparation, accounting and cost control, to sanitation and workplace safety.

<http://www.schospitality.org>

<http://www.nraef.org/prostart>



**[38—discontinued]**

**39 – S.C. Cosmetology License**

The Board of Cosmetology licenses and regulates cosmetologists, cosmetology instructors and schools, estheticians, and nail technicians.

<http://www.llr.state.sc.us/POL/Cosmetology>

**40 – American Red Cross-Babysitting**

Designed for eleven- to fifteen-year-olds, the Red Cross's Babysitter's Training Course teaches students to perform first aid, to select safe and age-appropriate toys and games for children, to handle bedtime issues, and to use appropriate diapering and feeding techniques.

<http://www.redcross.org/services/hss/courses/babyindex.html>

**41 – American Red Cross-Basic First Aid**

American Red Cross first aid programs and courses are designed to give individuals the confidence they need to be able to respond in an emergency situation with skills that can save a life.

<http://www.redcross.org/services/hss/courses/>

**42 – ASK Marketing**

The Marketing Education Resource Center's A\*S\*K Business Institute identifies highly qualified high school and college business/marketing students by providing objective, third-party documentation of learning achievement through A\*S\*K Business Certificates. Based on industry-validated skills and requisite knowledge, the certificates offer added value to completion of course work and other learning experiences. The A\*S\*K Business Institute connects high-achieving students with business partners and encourages the articulation of high school and college curricula.

<http://www.askinstitute.org/CertifProg.htm>

**43 – Certified Rooms Division Specialist**

The Lodging Management Program (LMP) high school curriculum provides eleventh- and twelfth-grade students with the classroom learning and real-life work experiences they need to begin a career in the hospitality industry. The Certified Rooms Division Specialist (CRDS) is a professional certification for graduates of the LMP. To qualify for the CRDS designation, graduating high school seniors must complete and pass the LMP exams for both Year 1 and Year 2, work in the lodging industry for at least thirty days, and obtain the signature of the general manager at the property where they are employed.

<http://www.lodgingmanagement.org/>

#### **44 – First Aid/CPR/AED**

The American Heart Association's Heartsaver CPR in Schools course is designed to teach both adult and pediatric (infant/child) CPR (cardio-pulmonary resuscitation) to middle and high school students. The course presents information about recognizing the signs of heart attack, cardiac arrest, stroke, and choking. In addition to teaching CPR skills, the course instructs students in how to use an AED (automated external defibrillator) and how to relieve choking. The course is organized into 40-minute blocks so that it can easily be integrated into the typical middle or high school class schedule.

<http://www.americanheart.org>

The American Red Cross's Preparedness programs in first aid, CPR, and AED are available to individuals for any age and can be tailored to the needs of specific groups and individuals.

<http://www.redcross.org>

#### **45 – CompTIA HTI+**

CompTIA Home Technology Integrator (HTI+) certification is a cross-industry, vendor-neutral credential providing recognition that a technical professional has attained a standard of excellence in the integrated home networks industry.

<http://www.comptia.org/certification/hti/default.aspx>

#### **46 – HVAC Excellence**

The HVAC Excellence Student Outcome Assessment Program identifies high school students who have successfully attained the knowledge for entry-level positions in the HVACR industry. The Heating, Electrical, Air Conditioning Technology (HEAT) exam is designed to measure the students retained knowledge of heating, electrical, and air conditioning theory and application. Students who pass the examination are awarded a certificate of achievement.

<http://www.hvacexcellence.org/heat.htm>

#### **47 – Oracle**

The Oracle Academy provides schools and school districts with the tools required to prepare students for twenty-first-century careers in technology. The program includes such courses as Database Programming with SQL, in which students gain an understanding of relational databases through the powerful Structured Query Language (SQL). The SQL commands, functions, and operators supported by Oracle as extensions to standard SQL are emphasized. The Database Programming with SQL portion of the Academy curriculum is designed to help prepare students to pass the Oracle Certified Professional (OCP) exam, "Introduction to Oracle9i SQL Exam." As part of the Academy, many students will want to take the OCP exam because it is the industry standard for proficiency with SQL.

<http://academy.oracle.com>

**[48—discontinued]**

**49 – ServSafe**

The National Restaurant Association Educational Foundation (NRAEF) offers an industry certification to high schools through its ServSafe program. ServSafe employee-level certification is available to South Carolina high school students. Recognized by the food service industry nationwide, this certification offers a number of benefits to the students by educating them in food safety and sanitation and improving their marketability in the workforce.

<http://www.nraef.org/servsafe/default.asp>

**50 – The Real Game**

The Get Real Game focuses on the transition from high school to postsecondary life. Using highly interactive activities, students strategize ways of acquiring necessary skills, training, education, and work experience to achieve their future goals. This program offers an opportunity for students to practice and hone the career and life-planning skills necessary for the twenty-first century. In the last session of the program, students create their own one-year Action Plan and Budget Plan. When they complete this final session, they receive a certificate of completion.

<http://www.realgame.org>

**51 – Electrocardiographic (EKG) Technician**

The American Society of Phlebotomy Technicians (ASPT) provides training and certification in all areas of health care in which phlebotomists are now involved. As do all individuals who earn ASPT certification, those who hold ASPT certification as an EKG Technician must complete 6 hours of continuing education yearly in order to maintain that credential.

<http://www.aspt.org>

**52 – Phlebotomist**

The American Society of Phlebotomy Technicians (ASPT) provides training and certification in all areas of health care in which phlebotomists are now involved. As do all individuals who earn ASPT certification, those who hold ASPT certification as an EKG Technician must complete 6 hours of continuing education yearly in order to maintain that credential.

<http://www.aspt.org>

**[53—discontinued]**

#### **54 – ADDA – Certified Apprentice Drafter**

The American Design Drafting Association (ADDA) Certification Program offers curriculum certification to schools as a means of quality assurance that benefits both education and industry. Curriculum certification through ADDA meets or exceeds the requirements set forth in most state and federal guidelines to receive funding for drafting and design programs. ADDA also offers professional certification to individuals through its Drafter Certification Program, which is open to all individuals, regardless of experience and formal education.

<http://www.adda.org>

#### **55 – S. C. Nail Technician License**

The Board of Cosmetology licenses and regulates cosmetologists, cosmetology instructors and schools, estheticians, and nail technicians.

<http://www.llr.state.sc.us/POL/Cosmetology>

#### **56 – NCCER – Core**

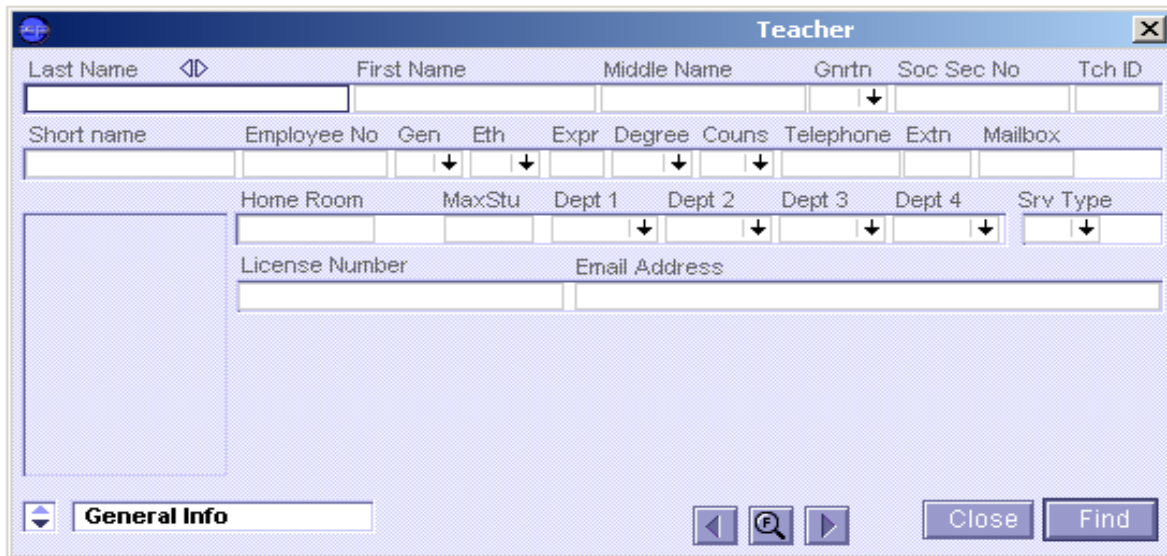
**[see entries 25–31, above]**

## SASI Modules

### BASIC SCHEDULING BRIEFCASE, TEACHER ATOM SCREEN

#### License Number

**Entry:** six-digit South Carolina teacher's certificate number



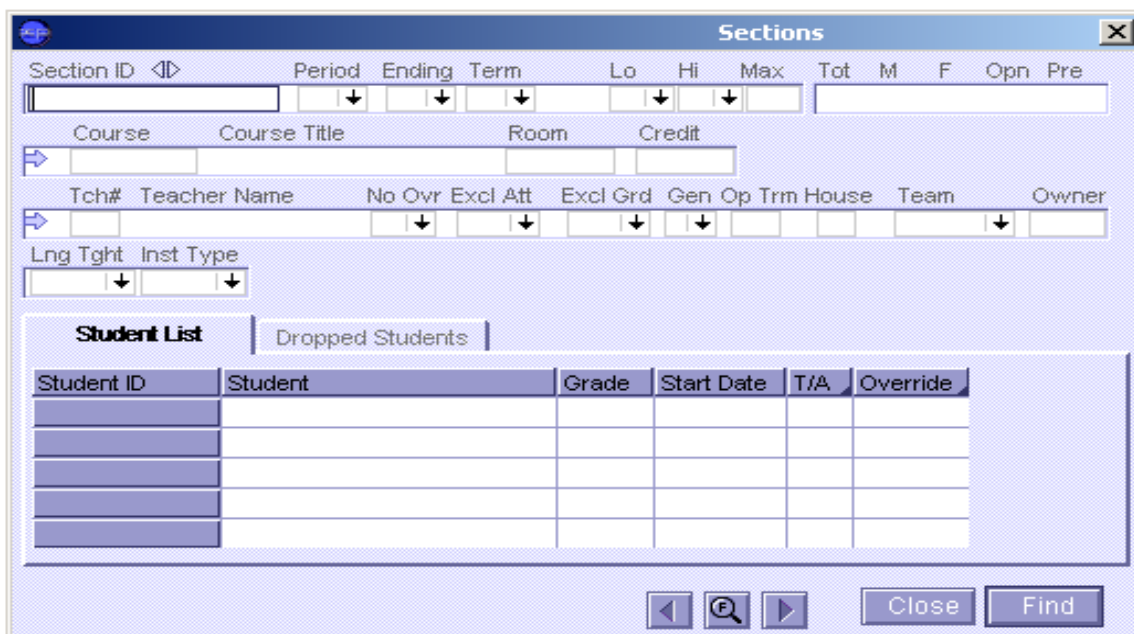
The Teacher ATOM screen is a form for entering teacher information. It includes fields for Last Name, First Name, Middle Name, Gnrtn, Soc Sec No, and Tch ID. Below these are Short name, Employee No, Gen, Eth, Expr, Degree, Couns, Telephone, Extn, and Mailbox. Further down are Home Room, MaxStu, Dept 1, Dept 2, Dept 3, Dept 4, and Srv Type. At the bottom are License Number and Email Address. A General Info tab is visible on the left, and navigation buttons (back, search, forward) and Close/Find buttons are at the bottom right.

### BASIC SCHEDULING BRIEFCASE, SECTIONS ATOM SCREEN

#### Owner

All sections of each particular CATE course taught at the career center must have the last three digits of the career center's seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) correctly entered in the **Owner** field.

**Entry:** last three digits of the career center's seven-digit SIDN



The Sections ATOM screen is a form for entering section information. It includes fields for Section ID, Period, Ending, Term, Lo, Hi, Max, Tot, M, F, Opn, and Pre. Below these are Course, Course Title, Room, and Credit. Further down are Tch#, Teacher Name, No Ovr, Excl Att, Excl Grd, Gen, Op, Trm, House, Team, and Owner. At the bottom are Lng Tght and Inst Type. A Student List tab is visible on the left, and navigation buttons (back, search, forward) and Close/Find buttons are at the bottom right.

Student ID	Student	Grade	Start Date	T/A	Override

## Collecting and Reporting Accurate Data

The district technology contact who is responsible for submitting SASI data to the SDE plays an important role in the data-collection process. The following are basic instructions with regard to the collection and reporting of CATE data:

- A. Transfer grades to the student course history file **before** you run the query to submit data to the SDE. Your **failure to transfer grades first** will result in **incomplete data**, which will affect your district's funding.
- B. Do a data record check while you are submitting the data to the SDE to ensure that your datasets are complete. If "0" records are transmitted, the SDE has received no data.
- C. Use only **uppercase** letters for academic and unit tags. Though the SASI system is not case sensitive, other systems utilized by SDE offices to analyze the data received *are* case sensitive. **Your failure to use uppercase letters for academic and unit tags may result in inaccurate data.**
- D. Refer to the Office of School Quality's document *South Carolina Department of Education Activity Coding System for SASI* for course coding.
- E. Submit your CATE data on or before the deadlines:

**Student placement follow-up report.....April 14, 2006 (Friday)**

**End-of-the-year report .....due with the SASI fourth quarterly data collection**

Please be reminded that the queries for submitting data to SDE will not be available after these dates.

## QUERIES TO VERIFY DATA

The following queries are provided to assist you in verifying the accuracy of your data. Please remember to use **only** approved course codes and CIP codes (see appendix C).

### CIP Code

ASTU USCO ASCH DistNum 1,SchoolNum LastName FirstName MiddleName  
Grade EconDisadv EdBarriers IndDisab SinglePare DispldHmak Completer  
CompleteYr RemoteSch Exceptions Diploma TechPrep CIPcode SORT CIPcode

### Graduation

ASTU USCO 1,SchoolNum LastName FirstName MiddleName Grade Diploma IF  
Grade = 12

**Program Completers**

ASTU USCO ASCH DistNum 1,SchoolNum LastName FirstName MiddleName  
Grade EconDisadv EdBarriers IndDisab SinglePare DispldHmak Completer  
CompleteYr RemoteSch Exceptions Diploma TechPrep CIPcode IF Completer='Y'  
SORT CIPcode

**CATE Placement**

ASTU USCO LastName FirstName MiddleName Grade Completer CompleteYr  
RemoteSch Exceptions Diploma CIPcode CATEPlace IF Grade =12 AND Completer  
='Y' AND Diploma ='Y' SORT CIPcode

**Special Populations**

ASTU USCO LastName FirstName MiddleName Grade EconDisadv EdBarriers  
IndDisab SinglePare DispldHmak

**Course**

ASTU ACHS TchName CrsTitle Course IF Course IN ['50000000' .. '6999ZZZZ' ]  
SORT Course

**Individual Course**

ASTU ACHS ASCH LastName FirstName MiddleName 1,Grade Course CrsTitle  
2,CredEarned TchName IF Course IN ['51000000' .. '5100ZZZZ' ]

**Multiple Courses**

ASTU ACHS ASCH LastName FirstName MiddleName 1,Grade Course CrsTitle  
2,CredEarned TchName IF Course IN ['51000000' .. '5100ZZZZ' ] OR Course IN  
['51740000' .. '5174ZZZZ'] OR Course IN ['30110000' .. '3011ZZZZ'] OR Course IN  
['30120000' .. '3012ZZZZ'] OR Course IN ['32310000' .. '3231ZZZZ'] OR Course IN  
['32410000' .. '3241ZZZZ']

**Teacher**

ATCH AMST TchNum LastName FirstName MiddleName Course CrsTitle  
2,TchNum TchName OwnerSch IF Course IN ['50000000' .. '6999ZZZZ']

## SDE CATE Personnel Contact Information

Perkins and Report Card Standards	Data Collection	Tech Prep	Gender Equity Special Populations
Joe Williams 803-734-8456 jwilliam@sde.state.sc.us  Merri Long 803-734-8451 mlong@sde.state.sc.us	Glenda Whittle 803-734-8438 gwhittle@sde.state.sc.us  Don Hilber 803-734-8450 dhilber@sde.state.sc.us	Wofford O'Sullivan 803-734-8564 wosulliv@sde.state.sc.us  Pat Flora 803-734-8455 pflora@sde.state.sc.us	Patrice Green 803-734-8410 pgreen@sde.state.sc.us

Questions related to content or the assignment of CIP codes for different career clusters may be directed to the following individuals:

Career Cluster	Contact Person
▶ Health Science	Nancy Allen 803-734-0372 nallen@sde.state.sc.us
▶ Business, Management, and Administration ▶ Information Technology ▶ Marketing, Sales, and Service	Katherine Cliatt 803-734-5349 kcliatt@sde.state.sc.us
▶ Agriculture, Food, and Natural Resources	William E. Keels 803-788-5700, ext. 31 fax: 803-736-4418 wkeels@clemson.edu
▶ Education and Training ▶ Hospitality and Tourism ▶ Human Services/Family and Consumer Sciences	Eleanor Glover 803-734-3826 eglover@sde.state.sc.us
▶ Arts, Audio-Video Technology, and Communications ▶ Law, Public Safety, and Security ▶ Science, Technology, Engineering, and Mathematics ▶ Transportation, Distribution, and Logistics	B. T. Martin 803-734-3398 btmartin@sde.state.sc.us
▶ Architecture and Construction ▶ Information Technology ▶ Manufacturing	Jim Spencer 803-734-8267 jspencer@sde.state.sc.us

**To send a fax to SDE CATE personnel, dial 803-734-3525.**



## APPENDIX A

### Perkins Accountability Standards for CATE

#### Key Terms

The federal Perkins Act requires each state to establish accountability standards in six core areas. The following are explanations of the terms used in South Carolina's state plan to define the populations measured and descriptions of the six accountability standards:

- **Vocational participant.** A vocational participant is any student who is enrolled in a CATE course associated with a career cluster.
- **Vocational concentrator.** A vocational concentrator is any student who has been assigned a CIP (Classification of Instructional Programs) code. CIP codes designate specific CATE programs and are used for federal reporting and assessing the Perkins standards for CATE programs. These codes are used to identify students who are pursuing at least 4 units of credit in CATE courses leading to a career goal.

**Note:** It is a local determination as to whether a student is pursuing 4 units of credit in CATE courses leading to a career goal; however, this additional guidance is pertinent: A student who periodically enrolls in CATE courses for interest and has no plans to complete a program should **not** be assigned a CIP code. Similarly, if a student will not have the opportunity to complete a CATE program, a CIP code should not be assigned.

- **Completer.** A CATE completer is a student with an assigned CIP code who has earned at least 4 units of credit in CATE courses leading to a career goal.

#### Accountability Standards

1. **CATE SKILL PROFICIENCY:** Percentage of CATE students (identified by CIP code) achieving a grade point average (GPA) of at least 2.0 on final grades for all the CATE courses they took during the year

##### ► Formula

numerator = total number of CIP-coded students achieving a final GPA of at least 2.0 averaged over the year for all the CATE courses they took during the year

denominator = total number of CIP-coded students who took at least *one* CATE course during the year

The formula uses the uniform grading scale to convert the numerical grade to a GPA. (A copy of the uniform grading scale is available online at <http://www.myschools.com/Offices/CSO/ugp/>.)

► **How to Make Your Data More Accurate**

- A. Ensure that each CATE course has been assigned an approved course code.
- B. Ensure that all sections of each particular CATE course taught at the career center have the last three digits of the career center's seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) correctly entered in the **Owner** field. Accurate SIDN numbers will allow the career center to be identified as teaching the particular courses.
- C. Ensure that each student is assigned the correct CIP code (see the note under "Vocational concentrator" in the "Key Terms" section above).
- D. Ensure that the seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) is correctly entered in the **Remote** field.
- E. Ensure that the **Exceptions** field is correctly coded if it is applicable.

**2. ACADEMIC ACHIEVEMENT.** Percentage of CATE students (identified by CIP code) achieving a GPA of at least 2.0 on final grades for the year in mathematics, science, and English language arts courses

► **Formula**

numerator = total number of CIP-coded students achieving a final GPA of at least 2.0 averaged over the year in mathematics, science, and English language arts courses

denominator = total number of CIP-coded students

The formula uses the uniform grading scale to convert the numerical grade to a GPA. (A copy of the uniform grading scale is available online at <http://www.myschools.com/Offices/CSO/ugp/>.)

► **How to Make Your Data More Accurate**

- A. Ensure that each student is assigned the correct CIP code (see the note under "Vocational concentrator" in the "Key Terms" section above).
- B. Ensure that the seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) is correctly entered in the **Remote** field.
- C. Ensure that the **Exceptions** field is correctly coded if it is applicable.

**3. GRADUATION.** Percentage of twelfth-grade CIP-coded students receiving a South Carolina high school diploma

► **Formula**

numerator = total number of twelfth-grade career and technology CIP-coded students receiving a South Carolina high school diploma

denominator = total number of twelfth-grade CIP-coded students

► **How to Make Your Data More Accurate**

- A. Ensure that each student is assigned the correct CIP code (see the note under “Vocational concentrator” in the “Key Terms” section above).
- B. Ensure that the **Diploma** field has been completed for all twelfth-grade students.

**4. PLACEMENT.** Percentage of available CATE completers placed in postsecondary education, military service, or employment, averaged over a three-year period

► **Formula**

numerator = total number of CATE completers who are placed in postsecondary education, military service, or employment averaged over a three-year period

denominator = total number of CATE completers who are available for placement, averaged over a three-year period

► **How to Make Your Data More Accurate**

- A. Ensure that the correct placement code has been entered in the **CATE Placement** field for each prior-year completer.
- B. Ensure that the correct data have been entered in the **Completer** field and the **Diploma** field.

**5. NONTRADITIONAL PARTICIPATION.** Percentage of students of the underrepresented gender who are participating in CATE courses leading to nontraditional training and employment

► **Formula**

numerator = total number of students of the underrepresented gender enrolled in CATE courses identified as leading to nontraditional training and employment

denominator = total number of students enrolled in CATE courses identified as leading to nontraditional training and employment

► **How to Make Your Data More Accurate**

- A. Ensure that each CATE course has been assigned an approved course code.
- B. Ensure that all sections of each particular CATE course taught at the career center have the last three digits of the career center’s seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) correctly entered in the **Owner** field. Accurate SIDN numbers will allow the career center to be identified as teaching the particular courses.

**6. NONTRADITIONAL RETENTION.** Percentage of CIP-coded students of the underrepresented gender who are completing CATE programs leading to nontraditional training and employment

► **Formula**

numerator = total number of CIP-coded students of the underrepresented gender who have completed CATE programs leading to nontraditional training and employment

denominator = total number of CIP-coded students who have completed CATE programs identified as leading to nontraditional training and employment

► **How to Make Your Data More Accurate**

- A. Ensure that each student is assigned the correct CIP code (see the note under “Vocational concentrator” in the “Key Terms” section above).
- B. Ensure that the **Completer** field is correctly coded.
- C. Ensure that the seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) is correctly entered in the **Remote** field.

## APPENDIX B

### CATE Report Card Measures

The Education Oversight Committee has established three measures for career centers on the career center report card and three indicators for the high schools on the high school report card.

#### Measures for Career Centers

1. **CATE SKILL PROFICIENCY.** Percentage of CATE students achieving an average of at least 2.0 on final grades for the year for all CATE courses they took at the career center during the year

- ▶ **Formula**

numerator = total number of CATE students achieving a final GPA of at least 2.0 averaged over the year for all CATE courses they took at the career center during the year

denominator = total number of students taking CATE courses at the career center during the year

The formula uses the uniform grading scale to convert the numerical grade to a GPA. (A copy of the uniform grading scale is available online at <http://www.myschools.com/Offices/CSO/ugp/>.)

- ▶ **How to Make Your Data More Accurate**

A. Ensure that all sections of each particular CATE course taught at the career center have the last three digits of the career center's seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) correctly entered in the **Owner** field. Accurate SIDN numbers will allow the career center to be identified as teaching the particular courses.

B. Ensure that the **Exceptions** field is correctly coded if it is applicable.

2. **GRADUATION.** Percentage of twelfth-grade CATE students receiving a South Carolina high school diploma

- ▶ **Formula**

numerator = total number of twelfth-grade CATE students at the career center receiving a South Carolina high school diploma

denominator = total number of twelfth-grade CATE students at the career center

► **How to Make Your Data More Accurate**

- A. Ensure that all sections of each particular CATE course taught at the career center have the last three digits of the career center's seven-digit SIDN (school identification number, sometimes referred to as the BEDS code) correctly entered in the **Owner** field. Accurate SIDN numbers will allow the career center to be identified as teaching the particular courses.
- B. Ensure that the **Diploma** field has been completed for all twelfth-grade students.

**3. PLACEMENT.** Percentage of available CATE completers placed in postsecondary education, military service, or employment, averaged over a three-year period

► **Formula**

numerator = total number of CATE completers who are placed in postsecondary education, military service, or employment averaged over a three-year period

denominator = total number of CATE completers who are available for placement, averaged over a three-year period

► **How to Make Your Data More Accurate**

- A. Ensure that the correct placement code has been entered in the **CATE Placement** field for each prior-year completer.
- B. Ensure that the correct data have been entered in the **Completer** field and the **Diploma** field.

## **CATE Indicators for High Schools**

**1. MASTERING CORE COMPETENCIES.** Percentage of CATE students achieving an average of at least 2.0 on final grades for the year for all CATE courses they have taken at the high school during the year

► **Formula**

numerator = total number of CATE students achieving a final GPA of at least 2.0 averaged over the year for all CATE courses they took at the high school during the year

denominator = total number of students taking CATE courses at the high school during the year

The formula uses the uniform grading scale to convert the numerical grade to a GPA. (A copy of the uniform grading scale is available online at <http://www.myschools.com/Offices/CSO/ugp/>.)

► **How to Make Your Data More Accurate**

Ensure that the **Exceptions** field is correctly coded if it is applicable.

**2. PLACEMENT.** Percentage of available CATE completers placed in postsecondary education, military service, or employment, averaged over a three-year period

► **Formula**

numerator = total number of CATE completers who are placed in postsecondary education, military service, or employment averaged over a three-year period

denominator = total number of CATE completers who are available for placement, averaged over a three-year period

► **How to Make Your Data More Accurate**

- A. Ensure that the correct placement code has been entered in the **CATE Placement** field for each prior-year completer.
- B. Ensure that the correct data have been entered in the **Completer** field and the **Diploma** field.

## **General Indicators: Career Centers and High Schools**

**1. PARTICIPATION IN CATE COCURRICULAR ORGANIZATIONS.** Percentage of students attending career centers or high schools who participate in career and technology cocurricular organizations

► **Formula for Career Centers**

numerator = total number of students at the career center who participate in career and technology cocurricular organizations (VICA, FBLA, FCCLA, DECA, HOSA, TSA, and FFA)

denominator = total number of students enrolled at the career center

► **Formula for High Schools**

numerator = total number of students at the high school who participate in career and technology cocurricular organizations (VICA, FBLA, FCCLA, DECA, HOSA, TSA, and FFA)

denominator = total number of students enrolled at the high school

- 2. WORK-BASED EXPERIENCES.** Percentage of students in grades nine through twelve who are involved with in-depth learning experiences (e.g., youth apprenticeships, registered apprenticeships, cooperative education, mentoring, shadowing, internships, and service learning) at a work site that allows students to acquire work-related knowledge and skills

► **Formula for Career Centers**

numerator = total number of students participating in work-based experiences with outside agencies or businesses

denominator = total number of students enrolled at the career center

► **Formula for High Schools**

numerator = total number of students at the high school who are participating in work-based experiences with outside agencies or businesses

denominator = total number of students at the high school



## APPENDIX C

### CATE Career Clusters

The following text is adapted from States' Career Clusters documents online at <http://www.careerclusters.org/whatis.htm> and <http://www.careerclusters.org/powerpoint/SpeakersKit-May2003.ppt>.

#### What Is a Career Cluster?

A career cluster is a grouping of occupations and broad industries based on commonalities. Career clusters link what students learn in high school with the knowledge and skills they need for success in college and careers. Career clusters identify pathways from high schools to two- and four-year colleges, graduate school, and the workplace so that students can learn in school what they can do in the future. This connection to future goals motivates students to work harder and enroll in more rigorous courses. The sixteen clusters represent all career possibilities:

Agriculture, Food, and Natural Resources  
Architecture and Construction  
Arts, Audio-Video Technology, and Communications  
Business, Management, and Administration  
Education and Training  
Finance\*  
Government and Public Administration\*  
Health Science  
Hospitality and Tourism  
Human Services/Family and Consumer Sciences  
Information Technology  
Law, Public Safety, and Security  
Manufacturing  
Marketing, Sales, and Service  
Science, Technology, Engineering, and Mathematics  
Transportation, Distribution, and Logistics

\*Currently no courses within this career cluster are offered in South Carolina.

#### Career Clusters Framework

**Cluster Level.** The foundation of skills and knowledge, both academic and technical, that all students within the cluster should achieve regardless of their particular pathway.

**Pathway Level.** The skills and knowledge, both academic and technical, that are necessary for a student to pursue a full range of career opportunities—from entry level to management, including technical and professional career specialties—within a pathway.

**Career Specialties.** The full range of career opportunities within each pathway.

## CATE Code Descriptions

- **Course ID.** The eight characters used to identify each instructional activity.

The first four characters are the digits that make up the course code. The fifth and sixth characters are digits that are district defined. One of three different characters will occupy the seventh position: either the alpha character that represents the academic tag for credit-bearing courses, or the numeric 0, or the digit that represents the special education activity instructional approach. One of two different characters will occupy the eighth position: either the alpha character that represents the unit tag for credit-bearing courses or the numeric 0. Use only **uppercase** characters for academic and unit tags.

- **Course Code.** The first four digits of the course ID.

The following table gives the ranges that define the course codes used in the calculations for the Perkins standards:

CATE Courses	Academic Courses
5000–6999 [ <i>Perkins funds may be used to improve these courses, with the exception of local board–approved (LBA) courses.</i> ]	3000–3099 .....English language arts 3100–3199, 4100–4199 ....mathematics 3200–3299 ..... science

- **CIP Code.** The six-digit CIP (Classification of Instructional Programs) codes designate the specific CATE programs and are used for federal reporting and assessing the federal Perkins standards. These codes are used to identify students who are pursuing at least 4 units of credit in CATE courses leading to a career goal. **CIP codes are *not* the same as course codes.**

- **Custom program within cluster.** These CIP codes are used to identify students who are pursuing at least 4 units of credit in CATE courses across programs *within the cluster* that lead to a career goal.
- **Cross-cluster program with emphasis on cluster.** These CIP codes are for students who pursue at least 4 units of credit related to a career goal in course work across two or more CATE cluster areas. The CIP code should be assigned on the basis of the student's postgraduation plans. Make sure you consult CATE teachers or guidance counselors to obtain information about students' postgraduation plans.
- **Cross-cluster program with emphasis on cluster (nontraditional).** These are CIP codes to be used for students who pursue at least 4 units of credit related to a career goal in course work across two or more CATE cluster areas. The CIP code should be assigned on the basis of the student's postgraduation plans. Please refer to the list of nontraditional courses and programs provided in appendix D to determine whether or not a particular student should be considered nontraditional. Make sure you consult CATE teachers or guidance counselors to obtain information about students' postgraduation plans.

## Courses within the CATE Clusters

All descriptions of cluster content in this section are taken with minor editorial emendations from the States' Career Clusters Web page at <http://www.careerclusters.org/16clusters.htm>.

### **CLUSTER: Agriculture, Food, and Natural Resources**

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Agricultural and Environmental Sciences 1 Agricultural and Environmental Sciences 2	5624 5625	½, 1, 2, 3
	Agricultural Business Management 1 Agricultural Business Management 2	5600 5601	½, 1, 2, 3
	Agricultural Mechanics 1 Agricultural Mechanics 2	5610 5611	½, 1, 2, 3
	Agricultural Products 1 Agricultural Products 2	5614 5615	½, 1, 2, 3
	Agricultural Sales and Services 1 Agricultural Sales and Services 2	5606 5607	½, 1, 2, 3
	Agricultural Technology 1 Agricultural Technology 2	5660 5661	½, 1, 2, 3
	Aquaculture 1 Aquaculture 2	5663 5664	½, 1, 2, 3
	Environmental and Natural Resources 1 Environmental and Natural Resources 2	5626 5627	½, 1, 2, 3
	Equine Science 1 Equine Science 2	5679 5680	½, 1, 2, 3
	Floriculture 1 Floriculture 2	5634 5635	½, 1, 2, 3
	Food Science Technology and Nutrition 1 Food Science Technology and Nutrition 2	5657 5658	½, 1, 2, 3
	Forestry 1 Forestry 2	5642 5643	½, 1, 2, 3
	Golf Course Technology 1 Golf Course Technology 2	5667 5668	½, 1, 2, 3
	Introduction to Horticulture 1 Introduction to Horticulture 2	5650 5651	½, 1, 2, 3
	Landscape Technology 1 Landscape Technology 2	5670 5671	½, 1, 2, 3

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type** = new courses for 2006–07

*Italics* = course title changes

## **CLUSTER: Agriculture, Food, and Natural Resources**

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Livestock Management 1 Livestock Management 2	5646 5647	½, 1, 2, 3
	Nursery, Greenhouse, and Garden Center Technology 1 Nursery, Greenhouse, and Garden Center Technology 2	5672 5673	½, 1, 2, 3
	Small Animal Care 1 Small Animal Care 2	5612 5613	½, 1, 2, 3
	Turf and Lawn Management 1 Turf and Lawn Management 2	5654 5655	½, 1, 2, 3
	Wildlife Management 1 Wildlife Management 2	5674 5675	½, 1, 2, 3
	Agriculture, Food, and Natural Resources, work-based credit Agriculture, Food, and Natural Resources, SBA Agriculture, Food, and Natural Resources, LBA*	5690 5698 5699	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
010000	Agriculture, Food, and Natural Resources Cluster		
<b>010205</b>	<b>Agricultural Structures and Technology</b>		
010CRS	Cross-Cluster Program with Emphasis on Agriculture, Food, and Natural Resources		
<b>030101</b>	<b>Environmental and Natural Resources Management</b>		
<b>010601</b>	<b>Horticulture</b>		
<b>011101</b>	<b>Plant and Animal Systems</b>		

## **CLUSTER: Architecture and Construction**

Careers in designing, planning, managing, building, and maintaining the built environment.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
470201	Air Conditioning and Refrigeration Technology 1	6003	1, 2, 3
	Air Conditioning and Refrigeration Technology 2	6004	
	Air Conditioning and Refrigeration Technology 3	6005	
	Air Conditioning and Refrigeration Technology 4	6006	
460222	Building Construction Cluster 1	6060	1, 2, 3
	Building Construction Cluster 2	6061	
	Building Construction Cluster 3	6062	
	Building Construction Cluster 4	6063	

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**

**CLUSTER: Architecture and Construction**

Careers in designing, planning, managing, building, and maintaining the built environment.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
480703	Cabinetmaking 1 Cabinetmaking 2 Cabinetmaking 3 Cabinetmaking 4	6080 6081 6082 6083	1, 2, 3
460201	Carpentry 1 Carpentry 2 Carpentry 3 Carpentry 4	6091 6092 6093 6094	1, 2, 3
460322	Electricity 1 Electricity 2 Electricity 3 Electricity 4	6287 6288 6289 6290	1, 2, 3
	Introduction to Construction	6001	½, 1
460102	Masonry 1 Masonry 2 Masonry 3 Masonry 4	6250 6251 6252 6253	1, 2, 3
460501	Plumbing 1 Plumbing 2 Plumbing 3 Plumbing 4	6280 6281 6282 6283	1, 2, 3
	Architecture and Construction, work-based credit Architecture and Construction, SBA Architecture and Construction, LBA*	6690 6298 6299	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
460CRS	Cross-Cluster Program with Emphasis on Architecture and Construction		
460999	Custom Program within Architecture and Construction		

**CLUSTER: Arts, Audio-Video Technology, and Communications**

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
500402	Advertising Design 1 Advertising Design 2 Advertising Design 3 Advertising Design 4	6120 6121 6122 6123	1, 2, 3

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**Italics = course title changes**

**CLUSTER: Arts, Audio-Video Technology, and Communications**

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
480101	Architectural Design 1	6170	1, 2, 3
	Architectural Design 2	6171	
	Mechanical Design 1	6172	
	Mechanical Design 2	6173	
480201	Graphic Communication 1	6200	1, 2, 3
	Graphic Communication 2	6201	
	Graphic Communication 3	6202	
	Graphic Communication 4	6203	
	Introduction to Graphic Communication	5205	½, 1
	Arts, Audio-Video Technology, and Communications, work-based credit	5290	½, 1, 2
	Arts, Audio-Video Technology, and Communications, SBA Arts, Audio-Video Technology, and Communications, LBA*	5298 5299	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
500CRS	Cross-Cluster Program with Emphasis on Arts, Audio-Video Technology, and Communications		
500999	Custom Program within Arts, Audio-Video Technology, and Communications		

**CLUSTER: Business, Management, and Administration**

Business, management, and administration careers encompass planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Business, Management, and Administration career opportunities are available in every sector of the economy.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Accounting 1	5001	1
	Accounting 2	5005	
	Administrative Support Technology	5122	½, 1
	Business and Electronic Communication	5040	½, 1
	Business and Marketing Internet Applications	5035	½
	Business and Personal Finance	5131	½, 1
	Business Computer Mathematics	5047	½, 1
	Business Law	5044	½, 1
	Computer Applications 1	5008	½, 1
	Computer Applications 2	5009	
	Desktop Publishing	5176	½, 1
	Digital Input Technologies	5180	½, 1
	Document Processing	5177	½, 1
	E-Commerce	5036	½, 1
	Entrepreneurship	5400	½, 1

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**

## CLUSTER: Business, Management, and Administration

Business, management, and administration careers encompass planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Business, Management, and Administration career opportunities are available in every sector of the economy.

CIP Code	Course Title	Course Code	Units
	Integrated Business Applications 1	5020	
	Integrated Business Applications 2	5021	1
	International Business and Marketing	5032	½, 1
	Introduction to Business and Marketing	5090	½, 1
	Introduction to Computer Technology	5060	½, 1
	Keyboarding	5100	½
	Professional and Leadership Development	5178	½
	Multimedia	5030	½, 1, 2
	Technical Writing	5043	½, 1
	Virtual Enterprise 1	5150	
	Virtual Enterprise 2	5151	
	Virtual Enterprise 3	5152	1, 2
	Virtual Enterprise 4	5153	
	Web Page Design and Development 1	5031	
	Web Page Design and Development 2	5033	½, 1, 2
	Business, Management, and Administration, work-based credit	5490	
	Business, Management, and Administration, SBA	5498	
	Business, Management, and Administration, LBA*	5499	½, 1, 2, 3
CIP Code	Program Title		
520801	Academy of Finance		
520400	Administration and Information Support		
520305	Business Analysis		
520300	Business Financial Management and Accounting		
529CRS	Cross-Cluster Program with Emphasis on Business, Management, and Administration		
529NTC	Cross-Cluster Program with Emphasis on Business, Management, and Administration (nontraditional)		
529999	Custom Program within Business, Management, and Administration		
520201	Management		
520703	Small Business Management		

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**

**CLUSTER: Education and Training**

Planning, managing, and providing education and training services and related learning support services.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Child Development 1 Child Development 2	5800 5801	½, 1
200201	Early Childhood Education 1 Early Childhood Education 2	5700 5701	1, 2, 3
	Introduction to Early Childhood Education	5702	1
	<b>Education and Training, work-based credit</b> <b>Education and Training, SBA</b> <b>Education and Training, LBA*</b>	<b>6390</b> <b>6398</b> <b>6399</b>	½, 1, 2, 3

**CLUSTER: Health Science**

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Emergency Medical Services 1 Emergency Medical Services 2 Emergency Medical Services 3	5530 5531 5532	½, 1, 2
	Emergency Medical Services 4	5533	2, 3
	Gerontology	5560	½, 1, 2
510000	Health Science Technology 1 Health Science Technology 2	5550 5551	1, 2, 3
	Introduction to Health Science	5554	½, 1
	Medical Terminology	5540	½, 1, 2
	Pharmacy Technology	5570	1, 2
511600	Practical Nursing, Phase 1	5520	3
510913	Sports Medicine 1 Sports Medicine 2	5555 5556	½, 1, 2
	Health Science, work-based credit Sports Medicine, work-based credit Health Science, SBA Health Science, LBA*	5590 5591 5598 5599	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
510CRS	Cross-Cluster Program with Emphasis on Health Science		
510NTC	Cross-Cluster Program with Emphasis on Health Science (nontraditional)		
510999	Custom Program within Health Science		

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**



## **CLUSTER: Hospitality and Tourism**

Hospitality and Tourism encompasses the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel-related services.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
200401	Culinary Arts 1 Culinary Arts 2	5720 5721	1, 2, 3
520904	Hospitality Management and Operations 1 Hospitality Management and Operations 2	5476 5477	1, 2, 3
	Introduction to Culinary Arts Introduction to Hospitality Management and Operations	5722 5478	1
	Hospitality and Tourism, work-based credit Hospitality and Tourism, SBA Hospitality and Tourism, LBA*	5190 5198 5199	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
520CRS	Cross-Cluster Program with Emphasis on Hospitality and Tourism		
520NTC	Cross-Cluster Program with Emphasis on Hospitality and Tourism (nontraditional)		
520999	Custom Program within Hospitality and Tourism		

## **CLUSTER: Human Services/Family and Consumer Sciences**

Preparing individuals for employment in career pathways that relate to families and human needs.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Clothing and Textiles 1 Clothing and Textiles 2	5804 5805	½, 1
	Consumer and Homemaking 1 Consumer and Homemaking 2	5808 5809	1
120403	Cosmetology 1 Cosmetology 2 Cosmetology 3 Cosmetology 4	6150 6151 6152 6153	1, 2, 3
	Family Life Education 1 Family Life Education 2	5820 5821	½, 1
	<i>Financial Fitness 1</i> [Consumer Education 1] <i>Financial Fitness 2</i> [Consumer Education 2]	5812 5813	½, 1
	Foods and Nutrition 1 Foods and Nutrition 2	5824 5825	½, 1
200402	<i>Food Science and Dietetics 1</i> [Food Science Technology and Nutrition 1] <i>Food Science and Dietetics 2</i> [Food Science Technology and Nutrition 2]	5757 5758	½, 1, 2

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type** = new courses for 2006–07

**Italics** = course title changes

**CLUSTER: Human Services/Family and Consumer Sciences**

Preparing individuals for employment in career pathways that relate to families and human needs.

CIP Code	Course Title	Course Code	Units
	<i>Housing and Interiors 1</i> [Housing and Home Furnishing 1] <i>Housing and Interiors 2</i> [Housing and Home Furnishing 2]	5830 5831	½, 1
	<i>Human Development: Responsible Life Choices 1</i> [Human Sexuality 1] <i>Human Development: Responsible Life Choices 2</i> [Human Sexuality 2]	5834 5835	½, 1
120410	<b>Nail Technology 1</b> <b>Nail Technology 2</b> <b>Nail Technology 3</b> <b>Nail Technology 4</b>	<b>6154</b> <b>6155</b> <b>6156</b> <b>6157</b>	1, 2, 3
	<i>Parenting Education 1</i> [Education for Parenthood 1] <i>Parenting Education 2</i> [Education for Parenthood 2]	5816 5817	½, 1
	Sports Nutrition	5759	½, 1
	Family and Consumer Sciences, work-based credit	5890	½, 1, 2, 3
	Family and Consumer Sciences, SBA	5898	
	Family and Consumer Sciences, LBA*	5899	
	Human Services, work-based credit	5790	
Human Services, SBA	5798		
Human Services, LBA*	5799		
CIP Code	Program Title		
200CRS	Cross-Cluster Program with Emphasis on Human Services		
200NTC	Cross-Cluster Program with Emphasis on Human Services (nontraditional)		
200999	Custom Program within Human Services		

**CLUSTER: Information Technology**

Building linkages in IT occupations framework: for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
	Computer Programming 1	5050	½, 1, 2
	Computer Programming 2	5051	
	Computer Programming 3	5052	
	Computer Programming 4	5053	
	Computer Service Technology 1	5320	1, 2, 3
	Computer Service Technology 2	5321	
	Computer Service Technology 3	5322	
	Computer Service Technology 4	5323	
	Home Systems Technology	5330	½, 1, 2
	Information Technology Foundations	5270	½, 1

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type** = new courses for 2006–07

**Italics** = course title changes

## CLUSTER: Information Technology

Building linkages in IT occupations framework: for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

CIP Code	Course Title	Course Code	Units
	Networking 1 Networking 2 Networking 3 Networking 4	5310 5311 5312 5313	1, 2
	Oracle Development Programming Language (PL)/SQL Oracle Java Oracle Management/Sequential Query Language (SQL)	5326 5325 5324	1, 2
	Information Technology, work-based credit Information Technology, SBA Information Technology, LBA*	5390 5398 5399	½, 1, 2
CIP Code	Program Title		
521206	Academy of Information Technology (National Academy Foundation)		
150CRS	Cross-Cluster Program with Emphasis on Information Technology		
150NTC	Cross-Cluster Program with Emphasis on Information Technology (nontraditional)		
150999	Custom Program within Information Technology		
150402	Information Support and Services		
110801	Interactive Media		
521204	Networking Systems		
521202	Programming and Software Development		

## CLUSTER: Law, Public Safety, and Security

Planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

CIP Code	Course Title	Course Code	Units
430299	Emergency and Fire Management Services 1 Emergency and Fire Management Services 2	6512 6513	1, 2, 3
	Introduction to Law, Public Safety, and Security	6505	½, 1
430199	Law Enforcement Services 1 Law Enforcement Services 2	6510 6511	1, 2, 3
	Law, Public Safety, and Security, work-based credit Law, Public Safety, and Security, SBA Law, Public Safety, and Security, LBA*	6590 6598 6599	½, 1, 2, 3
CIP Code	Program Title		
430CRS	Cross-Cluster Program with Emphasis on Law, Public Safety, and Security		
430999	Custom Program within Law, Public Safety, and Security		

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type** = new courses for 2006–07

*Italics* = course title changes

**CLUSTER: Manufacturing**

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

<b>CIP Code</b>	<b>Course Title</b>	<b>Course Code</b>	<b>Units</b>
470101	Core Electronics 1 Core Electronics 2 Core Electronics 3 Core Electronics 4	6133 6134 6135 6136	1, 2, 3
470103	Communication Electronics 1 Communication Electronics 2	6110 6111	1, 2, 3
470105	Industrial Electronics 1 Industrial Electronics 2	6220 6221	1, 2, 3
470399	Industrial Systems Technology 1 Industrial Systems Technology 2 Industrial Systems Technology 3 Industrial Systems Technology 4	6210 6211 6212 6213	1, 2, 3
	Introduction to Manufacturing Technology	6045	½, 1
480503	Machine Technology 1 Machine Technology 2 Machine Technology 3 Machine Technology 4	6230 6231 6232 6233	1, 2, 3
480501	Metal Fabrication 1 Metal Fabrication 2 Metal Fabrication 3 Metal Fabrication 4	6260 6261 6262 6263	1, 2, 3
480508	Welding Technology 1 Welding Technology 2 Welding Technology 3 Welding Technology 4	6340 6341 6342 6343	1, 2, 3
	Manufacturing, work-based credit Manufacturing, SBA Manufacturing, LBA*	6490 6498 6499	½, 1, 2, 3
<b>CIP Code</b>	<b>Program Title</b>		
480CRS	Cross-Cluster Program with Emphasis on Manufacturing		
480999	Custom Program within Manufacturing		

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**

**CLUSTER: Marketing, Sales, and Service**

Planning, managing, and performing marketing activities to reach organizational objectives.

CIP Code	Course Title	Course Code	Units
	Advertising	5470	½, 1
	Fashion Design and Apparel Construction 1	5710	1, 2, 3
	Fashion Design and Apparel Construction 2	5711	
	Fashion Merchandising	5410	½, 1
	Global Markets	5440	1
	Introduction to Fashion Design and Apparel Construction	5712	1
	Marketing	5421	½, 1
	Marketing Management	5431	½, 1, 2
	Sports and Entertainment Marketing	5425	½, 1
	Marketing, Sales, and Service, work-based credit	5091	½, 1, 2, 3
	Marketing, Sales, and Service, SBA	5098	
	Marketing, Sales, and Service, LBA*	5099	
CIP Code	Program Title		
080CRS	Cross-Cluster Program with Emphasis on Marketing, Sales, and Service		
080NTC	Cross-Cluster Program with Emphasis on Marketing, Sales, and Service (nontraditional)		
080999	Custom Program within Marketing, Sales, and Service		
520208	E-Marketing		
200301	Fashion Design and Apparel Construction		
521403	Global Marketing		
521401	Marketing Communications, Management, and Promotion		

\* Credits earned from an LBA (local board approved) course may not be used toward a completter program.

**Boldface type** = new courses for 2006–07

**Italics** = course title changes

**CLUSTER: Science, Technology, Engineering, and Mathematics**

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services and research and development services.

CIP Code	Course Title	Course Code	Units
	<i>Industrial Technology Education (Exploratory) 1</i> [Industrial Education Technology (Exploratory) 1]	6040	1, 2, 3
	<i>Industrial Technology Education (Exploratory) 2</i> [Industrial Education Technology (Exploratory) 2]	6041	
	Introduction to Pre-Engineering Technology	6095	½, 1
140101	PROJECT LEAD THE WAY Introduction to Engineering Design, <i>Level 1</i> [Level 2] Principles of Engineering, <i>Level 2</i> [Level 1] Digital Electronics, Level 3 Computer Integrated Manufacturing, Level 4 Engineering Design and Development (Capstone), Level 5	6051 6050 6052 6053 6054	1, 2, 3
	Optional fourth-level courses: Aerospace Technology Bio-Technology Civil Engineering and Architecture Telecommunications Engineering	6056 6057 6058 6059	1, 2, 3
	Pre-Engineering/Industrial Technology Education, work-based credit Pre-Engineering/Industrial Technology Education, SBA Pre-Engineering/Industrial Technology Education, LBA*	6090 6098 6099	½, 1, 2, 3
CIP Code	Program Title		
140CRS	Cross-Cluster Program with Emphasis on Science, Technology, Engineering, and Mathematics		
140999	Custom Program within Science, Technology, Engineering, and Mathematics		

**CLUSTER: Transportation, Distribution, and Logistics**

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

CIP Code	Course Title	Course Code	Units
470603	Automotive Collision Repair Technology 1	6020	1, 2, 3
	Automotive Collision Repair Technology 2	6021	
	Automotive Collision Repair Technology 3	6022	
	Automotive Collision Repair Technology 4	6023	
470604	Automotive Technology 1	6030	1, 2, 3
	Automotive Technology 2	6031	
	Automotive Technology 3	6032	
	Automotive Technology 4	6033	

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**Boldface type = new courses for 2006–07**

**Italics = course title changes**

**CLUSTER: Transportation, Distribution, and Logistics**

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Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

CIP Code	Course Title	Course Code	Units
470605	Diesel Engine Mechanics 1	6310	1, 2, 3
	Diesel Engine Mechanics 2	6311	
	Diesel Engine Mechanics 3	6312	
	Diesel Engine Mechanics 4	6313	
	Introduction to Transportation, Distribution, and Logistics	6015	½, 1
470606	Small Engine Technology 1	6300	1, 2, 3
	Small Engine Technology 2	6301	
	Small Engine Technology 3	6302	
	Small Engine Technology 4	6303	
	Transportation, Distribution, and Logistics, work-based credit	6790	½, 1, 2, 3
	Transportation, Distribution, and Logistics, SBA	6198	
	Transportation, Distribution, and Logistics, LBA*	6199	
CIP Code	Program Title		
470CRS	Cross-Cluster Program with Emphasis on Transportation, Distribution, and Logistics		
470999	Custom Program within Transportation, Distribution, and Logistics		

The following are additional career clusters, for which the Office of Career and Technology Education currently offers no courses:

**CLUSTER: Finance**

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Planning, services for financial and investment planning, banking, insurance, and business financial management.

**CLUSTER: Government and Public Administration**

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Executing governmental functions to include governance; national security; foreign service; planning; revenue and taxation; regulation; and management and administration at the local, state, and federal levels.

\* Credits earned from an LBA (local board approved) course may not be used toward a completer program.

**Boldface type = new courses for 2006–07**

**Italics = course title changes**

## Middle and High School CATE Courses

Credits earned for these courses or categories may not be used toward a completor program:

Middle School Courses (Seventh and Eighth Grades)				
Course Code				Course Title
Level 1	Level 2	Level 3	Level 4	
2841				Gateway to Technology
2840				Industrial Technology Education
2856				Introduction to Agriculture
2830				Introduction to Career Education
2857	2858			Personal Skills
Use 5100 as the course code for middle school students taking keyboarding for high school credit if (a) the course follows the CATE curriculum standards for keyboarding and (b) if a teacher with business education certification teaches the course. Use of the course code 5100 allows districts to count a ½ unit toward the 4 credit units needed to qualify for a CIP code.				
5100				Keyboarding (high school credit)

Ninth and Tenth Grade Only (Occupational)				
Course Code				Course Title
Level 1	Level 2	Level 3	Level 4	
6999				Introduction to Career and Technology Education

Applied Academic Courses				
Course Code				Course Title
Level 1	Level 2	Level 3	Level 4	
3226	3227			Applied Biology
3236				Chemistry for the Technologies
3021	3022			Communication for the Workplace
3141	3142	3143	3144	Mathematics for the Technologies
3243	3244			Physics for the Technologies



## CATE Programs: CIP Codes and Courses

The following are listings of the courses that create programs within several of the sixteen clusters. Completers must earn a minimum of 4 units of credit in CATE courses leading to a career goal to be considered program completers.

### Agriculture, Food, and Natural Resources Programs

#### **Agricultural Structures and Technology -----010205**

Agricultural and Environmental Sciences 1 and 2  
Agricultural Business Management 1 and 2  
Agricultural Mechanics 1 and 2  
Agricultural Sales and Services 1 and 2  
Agricultural Technology 1 and 2  
Agriculture, Food, and Natural Resources, work-based credit  
Agriculture, Food, and Natural Resources, SBA

#### **Environmental and Natural Resources Management -----030101**

Agricultural and Environmental Sciences 1 and 2  
Agricultural Mechanics 1 and 2  
Agricultural Technology 1 and 2  
Agriculture, Food, and Natural Resources, SBA  
Agriculture, Food, and Natural Resources, work-based credit  
Aquaculture 1 and 2  
Environmental and Natural Resources 1 and 2  
Forestry 1 and 2  
Wildlife Management 1 and 2

#### **Horticulture-----010601**

Agricultural and Environmental Sciences 1 and 2  
Agricultural Business Management 1 and 2  
Agricultural Mechanics 1 and 2  
Agricultural Products 1 and 2  
Agricultural Sales and Services 1 and 2  
Agricultural Technology 1 and 2  
Agriculture, Food, and Natural Resources, work-based credit  
Agriculture, Food, and Natural Resources, SBA  
Floriculture 1 and 2  
Golf Course Technology 1 and 2  
Introduction to Horticulture 1 and 2  
Landscape Technology 1 and 2  
Nursery, Greenhouse, and Garden Center Technology 1 and 2  
Turf and Lawn Management 1 and 2

## **Plant and Animal Systems-----011101**

Agricultural and Environmental Sciences 1 and 2  
Agricultural Business Management 1 and 2  
Agricultural Mechanics 1 and 2  
Agricultural Products 1 and 2  
Agricultural Sales and Services 1 and 2  
Agricultural Technology 1 and 2  
Agriculture, Food, and Natural Resources, work-based credit  
Agriculture, Food, and Natural Resources, SBA  
Aquaculture 1 and 2  
Equine Science 1 and 2  
Food Science Technology and Nutrition 1 and 2  
Livestock Management 1 and 2  
Small Animal Care 1 and 2

## **Business, Management, and Administration Programs**

### **Administration and Information Support-----520400**

#### **Required courses:**

Integrated Business Applications 1\* and 2\*  
Keyboarding

#### ***Plus one or more of the following:***

Accounting	Digital Input Technologies
Administrative Support Technology	Document Processing
Business and Electronic Communication	Information Technology Foundations**
Business and Marketing Internet Applications	Multimedia
Computer Programming	Virtual Enterprise
Desktop Publishing	Web Page Design and Development

### **Business Analysis-----520305**

#### **Required courses:**

Accounting 1  
Business and Personal Finance  
Computer Applications or Integrated Business Applications\*  
Keyboarding

#### ***Plus one or more of the following:***

Business and Electronic Communication	E-Commerce
Business and Marketing Internet Applications	International Business and Marketing
Business Computer Mathematics	Virtual Enterprise
Business Law	

\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## **Business Financial Management and Accounting -----520300**

### **Required courses:**

Accounting 1 and 2

Computer Applications or Integrated Business Applications\*

Keyboarding

### ***Plus one or more of the following:***

Business and Electronic Communication

Business and Personal Finance

Business Computer Mathematics

Business Law

Entrepreneurship

International Business and Marketing

Virtual Enterprise

## **Management -----520201**

### **Required courses:**

Accounting 1

Computer Applications or Integrated Business Applications\*

Entrepreneurship

Keyboarding

### ***Plus one or more of the following:***

Business and Personal Finance

Business Computer Mathematics

Business Law

E-Commerce

International Business and Marketing

Marketing

Marketing Management

Virtual Enterprise

## **Small Business Management -----520703**

### **Required courses:**

Computer Applications or Integrated Business Applications\*

Keyboarding

Virtual Enterprise 1 and 2

### ***Plus one or more of the following:***

Accounting I

Business and Marketing Internet Applications

Business and Personal Finance

Business Computer Mathematics

Business Law

E-Commerce

Entrepreneurship

Marketing

Virtual Enterprise 3

Virtual Enterprise 4

Web Page Design and Development

## **Finance Program**

## **Academy of Finance-----520801**

### **Required courses:**

Accounting 1 and 2

***Plus courses determined by the National Academy Foundation (<http://www.naf.org>)***

\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## Hospitality and Tourism Programs

### **Culinary Arts -----200401**

**Required courses:**

Culinary Arts 1 and 2

***Plus one or more of the following:***

Accounting Business and Electronic Communication Entrepreneurship Financial Fitness 1 Financial Fitness 2 Foods and Nutrition 1 Foods and Nutrition 2	Hospitality Management and Operations 1 Human Development: Responsible Life Choices Introduction to Culinary Arts Sports Nutrition
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### **Hospitality Management and Operations -----520904**

**Required courses:**

Hospitality Management and Operations 1 and 2

***Plus one or more of the following:***

Accounting Consumer Homemaking Education 1 Consumer Homemaking Education 2 Culinary Arts 1 Entrepreneurship Financial Fitness 1 Financial Fitness 2	Foods and Nutrition 1 Foods and Nutrition 2 Introduction to Hospitality Management and Operations Marketing Sports Entertainment and Recreation Sports Nutrition
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## Human Services/Family and Consumer Sciences Programs

### **Early Childhood Education -----200201**

**Required courses:**

Early Childhood Education 1 and 2

***Plus one or more of the following:***

Accounting Business Communication Child Development 1 Child Development 2 Consumer and Homemaking 1 Consumer and Homemaking 2 Entrepreneurship Family Life Education 1 Family Life Education 2	Financial Fitness 1 Financial Fitness 2 Human Development: Responsible Life Choices 1 Human Development: Responsible Life Choices 2 Introduction to Early Childhood Education Introduction to Health Science Technology Parenting Education 1 Parenting Education 2 Teacher Cadets
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\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## **Food Sciences and Dietetics -----200402**

### **Required courses:**

Food Science and Dietetics 1 and 2

### ***Plus one or more of the following:***

Accounting

Business Communication

Child Development 1

Child Development 2

Foods and Nutrition 1

Foods and Nutrition 2

Marketing

Parenting Education 1

Parenting Education 2

Sports Nutrition

## **Information Technology Programs**

## **Academy of Information Technology (National Academy Foundation) -----521206**

### **Required courses:**

Computer Programming 1

Integrated Business Applications 1\* and 2\*

***Plus courses determined by the National Academy Foundation (<http://www.naf.org>)***

## **Information Support and Services-----150402**

### **Required courses:**

Computer Service Technology 1 and 2

### ***Plus one or more of the following:***

Computer Applications

Computer Programming

Core Electronics

Digital Input Technologies

E-Commerce

Home Systems Technology

Information Technology Foundations\*\*

Integrated Business Applications\*

Networking

Technical Writing

## **Interactive Media -----110801**

### **Required courses:**

Multimedia

Web Page Design and Development 1

### ***Plus one or more of the following:***

Computer Applications

Computer Programming

Desktop Publishing

Graphic Communication

Integrated Business Applications\*

Oracle Development PL/SQL

Oracle Management/SQL

Web Page Design and Development 2

\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## **Networking Systems -----521204**

### **Required courses:**

Networking 1 and 2

### ***Plus one or more of the following:***

Computer Applications  
Computer Programming  
Computer Service Technology  
Core Electronics  
Digital Input Technologies

Home Systems Technology  
Information Technology Foundations\*\*  
Integrated Business Applications\*  
Networking 3  
Networking 4

## **Programming and Software Development -----521202**

### **Required courses:**

Computer Programming 1 and 2

### ***Plus one or more of the following:***

Computer Applications  
Computer Programming 3  
Computer Programming 4  
Computer Service Technology  
Information Technology Foundations\*\*  
Integrated Business Applications\*

Networking  
Oracle Development PL/SQL  
Oracle Java  
Oracle Management/SQL  
Web Page Design and Development

## **Marketing, Sales, and Service Programs**

## **E-Marketing-----520208**

### **Required courses:**

Computer Applications or Integrated Business Applications\*  
E-Commerce  
Keyboarding  
Marketing

### ***Plus one or more of the following:***

Advertising  
Business and Electronic Communication  
Business and Marketing Internet Applications  
Entrepreneurship

International Business and Marketing  
Marketing Management  
Sports and Entertainment Marketing  
Web Page Design and Development

## **Fashion Design and Apparel Construction-----200301**

### **Required courses:**

Fashion Design and Apparel Construction 1 and 2

### ***Plus one or more of the following:***

Business and Electronic Communication  
Clothing and Textiles 1  
Clothing and Textiles 2  
Entrepreneurship

Fashion Merchandising  
Housing and Home Furnishings  
Introduction to Fashion Design and Apparel Construction  
Marketing

\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## **Global Marketing -----521403**

### **Required courses:**

Computer Applications **or** Integrated Business Applications\*

Global Markets

Keyboarding

Marketing **or** International Business and Marketing

### **Plus one or more of the following:**

Business and Marketing Internet Applications      International Business and Marketing

Business Computer Mathematics      Marketing

Business Electronic Communication      Marketing Management

E-Commerce      Virtual Enterprise

Entrepreneurship

## **Marketing Communications, Management, and Promotion -----521401**

### **Required courses:**

Computer Applications or Integrated Business Applications\*

Keyboarding

Marketing

**And either** Fashion Merchandising  
              **or** Hospitality Management and Operations 1  
              **or** Marketing Management  
              **or** Sports and Entertainment Marketing

### **Plus one or more of the following:**

Advertising      Hospitality Management and Operations 2

Business and Electronic Communication      International Business and Marketing

Entrepreneurship      Sports and Entertainment Marketing

Fashion Merchandising      Virtual Enterprise

\* MOS (Microsoft Office Specialist) certification course

\*\* IC<sup>3</sup> (Internet Computing Core Certification) course

## APPENDIX D

### FY 2005–06 Nontraditional CATE Courses and Programs

Nontraditional CATE Courses for Females				
COURSE CODE				COURSE TITLE
LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	
5020	5021			Integrated Business Applications
5044				Business Law
5050	5051	5052	5053	Computer Programming
5205				Introduction to Graphic Communication
5270				Information Technology Foundations
5290				Arts, A-V Technology, and Communications, work-based credit
5298				Arts, A-V Technology, and Communications, SBA
5310	5311	5312	5313	Networking
5320	5321	5322	5323	Computer Service Technology
5390				Information Technology, work-based credit
5398				Information Technology, SBA
5555	5556			Sports Medicine
5600	5601			Agricultural Business Management
5606	5607			Agricultural Sales and Services
5610	5611			Agricultural Mechanics
5612	5613			Small Animal Care
5614	5615			Agricultural Products
5624	5625			Agriculture and Environmental Sciences
5626	5627			Environmental and Natural Resources
5634	5635			Floriculture
5642	5643			Forestry
5646	5647			Livestock Management
5650	5651			Introduction to Horticulture
5654	5655			Turf and Lawn Management
5657	5658			Food Science Technology and Nutrition
5660	5661			Agricultural Technology
5663	5664			Aquaculture
5667	5668			Golf Course Technology
5670	5671			Landscape Technology
5672	5673			Nursery, Greenhouse, and Garden Center Technology
5674	5675			Wildlife Management
5679	5680			Equine Science
5690				Agriculture, Food, and Natural Resources, work-based credit
5698				Agriculture, Food, and Natural Resources, SBA
6001				Introduction to Construction
6003	6004	6005	6006	Air Conditioning and Refrigeration Technology
6015				Introduction to Transportation, Distribution, and Logistics
6020	6021	6022	6023	Automotive Collision Repair Technology
6030	6031	6032	6033	Automotive Technology
6040	6041			Industrial Technology Education (Exploratory)
6045				Introduction to Manufacturing Technology
6050	6051	6052	6053	Project Lead the Way
6060	6061	6062	6063	Building Construction Cluster
6080	6081	6082	6083	Cabinetmaking
6090				Pre-Engineering/Industrial Technology Education, work-based credit



Nontraditional CATE Courses for Females				
COURSE CODE				COURSE TITLE
LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	
6091	6092	6093	6094	Carpentry
6098				Pre-Engineering/Industrial Technology Education, SBA
6120	6121	6122	6123	Advertising Design
6133	6134	6135	6136	Core Electronics
6170	6171			Architectural Design
6172	6173			Mechanical Design
6198				Transportation, Distribution, and Logistics, SBA
6200	6201	6202	6203	Graphic Communication
6210	6211	6212	6213	Industrial Systems Technology
6230	6231	6232	6233	Machine Technology
6250	6251	6252	6253	Masonry
6260	6261	6262	6263	Metal Fabrication
6280	6281	6282	6283	Plumbing
6287	6288	6289	6290	Electricity
6298				Architecture and Construction, SBA
6300	6301	6302	6303	Small Engine Technology
6310	6311	6312	6313	Diesel Engine Mechanics
6340	6341	6342	6343	Welding Technology
6490				Manufacturing, work-based credit
6498				Manufacturing, SBA
6505				Introduction to Law, Public Safety, and Security
6510	6511			Law Enforcement Services
6512	6513			Emergency and Fire Management Services
6590				Law, Public Safety, and Security, work-based credit
6598				Law, Public Safety, and Security, SBA
6690				Architecture and Construction, work-based credit
6790				Transportation, Distribution, and Logistics, work-based credit

Nontraditional CATE Courses for Males				
COURSE CODE				COURSE TITLE
LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	
5040				Business and Electronic Communication
5122				Administrative Support Technology
5410				Fashion Merchandising
5431				Marketing Management
5520				Practical Nursing, Phase 1
5550	5551			Health Science Technology
5554				Introduction to Health Science
5560				Gerontology
5598				Health Science, SBA
5700	5701			Early Childhood Education
5702				Introduction to Early Childhood Education
5710	5711			Fashion Design and Apparel Construction
5720	5721			Culinary Arts
5757	5758			Food Science Technology and Nutrition
5759				Sports Nutrition

### Nontraditional CATE Courses for Males

COURSE CODE				COURSE TITLE
LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	
5790				Human Services, work-based credit
5798				Human Services, SBA
5800	5801			Child Development
5804	5805			Clothing and Textiles
5824	5825			Foods and Nutrition
5830	5831			Housing and Interiors
6150	6151	6152	6153	Cosmetology

### Nontraditional CATE Programs for Females

CIP CODE	PROGRAM TITLE
010000	Agriculture, Food, and Natural Resources Cluster
010CRS	Cross-Cluster Program with Emphasis on Agriculture, Food, and Natural Resources
140101	Project Lead the Way
140999	Custom Program within Science, Technology, Engineering, and Mathematics
140CRS	Cross-Cluster Program with Emphasis on Science, Technology, Engineering, and Mathematics
150999	Custom Program within Information Technology
150CRS	Cross-Cluster Program with Emphasis on Information Technology
150NTC	Cross-Cluster Program with Emphasis on Information Technology (nontraditional)
150402	Information Support and Services
430199	Law Enforcement Services
430999	Custom Program within Law, Public Safety, and Security
430CRS	Cross-Cluster Program with Emphasis on Law, Public Safety, and Security
460CRS	Cross-Cluster Program with Emphasis on Architecture and Construction
460102	Masonry
460201	Carpentry
460222	Building Construction Cluster
460322	Electricity
460501	Plumbing
460999	Custom Program within Architecture and Construction
470101	Core Electronics
470201	Air Conditioning and Refrigeration Technology
470399	Industrial Systems Technology
470603	Automotive Collision Repair Technology
470604	Automotive Technology
470605	Diesel Engine Mechanics
470606	Small Engine Technology
470999	Custom Program within Transportation, Distribution, and Logistics
470CRS	Cross-Cluster Program with Emphasis on Transportation, Distribution, and Logistics
480101	Architectural/Mechanical Design
480201	Graphic Communication
480501	Metal Fabrication
480503	Machine Technology

<b>Nontraditional CATE Programs for Females</b>	
<b>CIP CODE</b>	<b>PROGRAM TITLE</b>
480508	Welding Technology
480703	Cabinetmaking
480999	Custom Program within Manufacturing
480CRS	Cross-Cluster Program with Emphasis on Manufacturing
500CRS	Cross-Cluster Program with Emphasis on Arts, Audio-Video Technology, and Communications
500402	Advertising Design
500999	Custom Program within Arts, Audio-Video Technology, and Communications
521202	Programming and Software Development
521204	Networking Systems
529NTC	Cross-Cluster Program with Emphasis on Business, Management, and Administration (nontraditional)

<b>Nontraditional CATE Programs for Males</b>	
<b>CIP CODE</b>	<b>PROGRAM TITLE</b>
080NTC	Cross-Cluster Program with Emphasis on Marketing, Sales, and Service (nontraditional)
120403	Cosmetology
200CRS	Cross-Cluster Program with Emphasis on Human Services
200201	Early Childhood Education
200301	Fashion Design and Apparel Construction
200401	Culinary Arts
200402	Food Science and Dietetics
200999	Custom Program within Human Services
510000	Health Science Technology
510NTC	Cross-Cluster Program with Emphasis on Health Science (nontraditional)
511600	Practical Nursing, Phase 1
520400	Administration and Information Support
520NTC	Cross-Cluster Program with Emphasis on Hospitality and Tourism (nontraditional)
529NTC	Cross-Cluster Program with Emphasis on Business, Management, and Administration (nontraditional)

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